

***What Is Claimed Is:***

1. An isolated nucleic acid molecule comprising a polynucleotide selected from the group consisting of:

- (a) a polynucleotide encoding amino acids 1 to 950 in SEQ ID NO:2;
- (b) a polynucleotide encoding amino acids 2 to 950 in SEQ ID NO:2;
- (c) a polynucleotide encoding amino acids 29 to 950 in SEQ ID NO:2;
- (d) a polynucleotide encoding amino acids 30 to 950 in SEQ ID NO:2;
- (e) a polynucleotide encoding the complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209581;
- (f) a polynucleotide encoding the mature amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209581;
- (g) a polynucleotide encoding amino acids 1 to 968 of SEQ ID NO:125;
- (h) a polynucleotide encoding amino acids 235 to 459 in SEQ ID NO:2;
- (i) a polynucleotide encoding amino acids 460 to 544 in SEQ ID NO:2;
- (j) a polynucleotide encoding amino acids 545 to 598 in SEQ ID NO:2;
- (k) a polynucleotide encoding amino acids 841 to 894 in SEQ ID NO:2;
- (l) a polynucleotide encoding amino acids 895 to 934 in SEQ ID NO:2;
- (m) a polynucleotide encoding amino acids 536 to 613 in SEQ ID NO:2;

and

- (n) a polynucleotide encoding amino acids 549 to 563 in SEQ ID NO:2.

2. A method for making a recombinant vector comprising inserting an isolated nucleic acid molecule of claim 1 into a vector in operable linkage to a promoter.

3. A recombinant vector produced by the method of claim 2.

4. A method of making a recombinant host cell comprising introducing the recombinant vector of claim 3 into a host cell.

5. A recombinant host cell produced by the method of claim 4.

6. A recombinant method for producing a polypeptide, comprising culturing the recombinant host cell of claim 5 under conditions such that said polypeptide is expressed and recovering said polypeptide.

5 7. An isolated nucleic acid molecule, comprising 50 contiguous nucleotides of the coding region of SEQ ID NO:1, or the complement thereof, wherein said nucleic acid molecule does not comprise any one of SEQ ID NOs:14-41.

8. An isolated nucleic acid molecule comprising a polynucleotide selected from the group consisting of:

- (a) a polynucleotide encoding amino acids 1 to 890 in SEQ ID NO:4;
  - (b) a polynucleotide encoding amino acids 2 to 890 in SEQ ID NO:4;
  - (c) a polynucleotide encoding amino acids 24 to 890 in SEQ ID NO:4;
  - (d) a polynucleotide encoding amino acids 112 to 890 in SEQ ID NO:4;
  - (e) a polynucleotide encoding the complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209582;
  - (f) a polynucleotide encoding the mature amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209582;
  - (g) a polynucleotide encoding amino acids 214 to 439 in SEQ ID NO:4;
  - (h) a polynucleotide encoding amino acids 440 to 529 in SEQ ID NO:4;
  - (i) a polynucleotide encoding amino acids 530 to 583 in SEQ ID NO:4;
  - (j) a polynucleotide encoding amino acids 837 to 890 in SEQ ID NO:4;
  - (k) a polynucleotide encoding amino acids 280 to 606 in SEQ ID NO:4;
- and
- (l) a polynucleotide encoding amino acids 529 to 548 in SEQ ID NO:4.

9. A method for making a recombinant vector comprising inserting an isolated nucleic acid molecule of claim 8 into a vector in operable linkage to a promoter.

10. A recombinant vector produced by the method of claim 9.

11. A method of making a recombinant host cell comprising introducing the recombinant vector of claim 10 into a host cell.

12. A recombinant host cell produced by the method of claim 11.

13. A recombinant method for producing a polypeptide, comprising culturing the recombinant host cell of claim 12 under conditions such that said polypeptide is expressed and recovering said polypeptide.

14. An isolated nucleic acid molecule, comprising 50 contiguous nucleotides of the coding region of SEQ ID NO:3, or the complement thereof, wherein said nucleic acid molecule does not comprise any one of SEQ ID NOs:19-22, 24 or 42-77.

15. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) amino acids 1 to 950 in SEQ ID NO:2;  
(b) amino acids 2 to 950 in SEQ ID NO:2;  
(c) amino acids 29 to 950 in SEQ ID NO:2;  
(d) amino acids 30 to 950 in SEQ ID NO:2;  
(d) the complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209581;

(e) the a mature amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209581;

(f) amino acids 1 to 968 of SEQ ID NO:125;  
(g) amino acids 235 to 459 in SEQ ID NO:2;  
(h) amino acids 460 to 544 in SEQ ID NO:2;  
(i) amino acids 545 to 598 in SEQ ID NO:2;  
(j) amino acids 841 to 894 in SEQ ID NO:2;  
(k) amino acids 895 to 934 in SEQ ID NO:2;  
(l) amino acids 536 to 613 in SEQ ID NO:2; and  
(m) amino acids 549 to 563 in SEQ ID NO:2.

16. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) amino acids 1 to 890 in SEQ ID NO:4;  
(b) amino acids 2 to 890 in SEQ ID NO:4;  
(c) amino acids 24 to 890 in SEQ ID NO:4;  
(d) amino acids 112 to 890 in SEQ ID NO:4;  
(e) the complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209582;

(f) the mature amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209582;

(g) amino acids 214 to 439 in SEQ ID NO:4;  
(h) amino acids 440 to 529 in SEQ ID NO:4;  
(i) amino acids 530 to 583 in SEQ ID NO:4;  
(j) amino acids 837 to 890 in SEQ ID NO:4;  
(k) amino acids 280 to 606 in SEQ ID NO:4; and  
(l) amino acids 529 to 548 in SEQ ID NO:4.

17. A polypeptide comprising the amino acid sequence m-n of SEQ ID NO:2, wherein m is an integer of 1 to 950, and wherein n is an integer of 10 to 950.

18. A polypeptide comprising the amino acid sequence m-n of SEQ ID NO:4, wherein m is an integer of 1 to 890, and wherein n is an integer of 10 to 890.

19. A method for inhibiting angiogenesis in an individual, comprising administering an effective amount of METH1 or METH2.

20. The method of claim 19, wherein said method is used to treat cancer, benign tumors, an ocular angiogenic disease, rheumatoid arthritis, psoriasis, delayed wound healing, endometriosis, vasculogenesis, granulations, hypertrophic scars, nonunion fractures, scleroderma, trachoma, vascular adhesions, myocardial angiogenesis, coronary collaterals, cerebral collaterals, arteriovenous malformations, ischemic limb angiogenesis, Osler-Webber Syndrom, plaque neovascularization, telangiectasia, hemophiliac joints,

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